

HICKMAN'S EGG RANCH INC. ATTENTION: GLENN HICKMAN 6515 SOUTH JACKRABBIT TRAIL BUCKEYE, AZ 85326

This Permit is issued in accordance with Maricopa County Air Quality Department (MCAQD) Regulations, Rule 200, §303, and Arizona Revised Statutes, §49 -404c and §49-480. The attached Permit Conditions are incorporated into and form an integral part of this Permit.

If the MCAQD Control Officer determines that additional monitoring, sam pling, modeling and/or control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and/or welfare, the MCAQD Control Officer will amend the provisions of this Permit.

This Permit may be subject to suspension or revocation for cause including nonpayment of fees, noncompliance with Arizona State Statutes, Maricopa County Air Quality Regulations, or the attached Permit Conditions, or if the MCAQD Control Officer determines that significant misrepresentation exists in the application and supporting documentation filed to obtain or modify this Permit.

If you need assistance with the permit, please contact the Small Business Assistance/Ombudsman office at 602.506.5102 or contact the undersigned at 602.506.7248. Email communications may be sent to AQPermits@mail.maricopa.gov.

# MARICOPA COUNTY AIR QUALITY DEPARTMENT

**Engineering and Permitting Division** 

1001 N. Central Avenue, Suite 400, Phoenix, Arizona 85004 Phone: (602) 506-6010 Fax: (602) 506-6985

# AIR QUALITY PERMIT TO OPERATE AND/OR CONSTRUCT

(As required by Title 49, Chapter 3, Article 2, Section 49-480, Arizona Revised Statutes)

# **ISSUED TO**

Hickman's Egg Ranch, Inc. 41625 West Indian School Road Tonopah, AZ 85354

This air quality permit to operate and/or construct does not relieve the applicant of the responsibility of meeting all air pollution regulations.

THE PERMITTEE IS SUBJECT TO THE SPECIFIC AND GENERAL CONDITIONS IDENTIFIED IN THIS PERMIT.

 PERMIT NUMBER:
 140062
 REVISION DATE:
 11/17/2014

**REVISION NUMBER:** 0.0.0.0 **EXPIRATION DATE:** 11/30/2019

lodd // artin Todd Martin, Non-Title V Permit Supervisor

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Any cited regulatory paragraphs or section numbers refer to the version of the rules and regulations that were in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise. However, in the event the rules and regulations are amended during the term of this Permit, the amended rules and regulations shall apply to this Permit. Whenever the term, Control Officer, is used in this Permit it shall be int erpreted to mean, Control Officer or designated representative. Where the term "Rule" appears, it shall be construed to mean "Maricopa County Air Pollution Control Regulations" unless otherwise noted.

## **SPECIFIC CONDITIONS**

# **Odor Control**

#### 1. Standards:

No person shall emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[Rule 320 §300]

a. Material Containment Required: Materials including, but not limit ed to, manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air in such quantities or concentrations as to cause air pollutions smells, aromas or stenches commonly recognized as offensive, obnoxious or objectionable to a substantial part of a community. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[Rule 320 §302]

## 2. Compliance Demonstration:

The Permittee shall perform a compliance demonstration by conducting a test to monitor hydrogen sulfide levels within 90 days of any of the following events:

- a. The issuance of Rev.0.0.0.0 of this permit; or
- b. The receipt of three (3) odor complaints within any 12-month period; or
- c. The reception of a written request from the Department.

The compliance demonstration shall be perfor med at a location representing the nearest occupied place beyond the premises on which the source of hydrogen sulfide is located.

The Permittee shall perform an additional compliance demonstration within six (6) months of completing the initial demonstration. If the average hydrogen sulfide concentration is less than 0.03 ppmv in any of the first two compliance demonstrations, the monitoring shall be subsequently conducted on an annual basis. If the hydrogen sulfide concentration is less than 0.03 ppmv for two consecutive annual compliance demonstrations, compliance demonstrations will no longer be required. If results from any annual compliance demonstration indicate that the hydrogen sulfide concentration is greater than 0.03 ppmv, the Permittee shall return to the semi-annual compliance demonstration schedule.

[Rule 320 §304]

## 3. Compliance Plan:

In the event of an exceedance of hydrogen sulfide, the Permittee shall submit a Compliance Plan to the Compliance Manager of the Maricopa County Air Quality Department for approval. The Compliance Plan shall include:

- a. Technological evaluation of additional odor control alternatives at the plant.
- b. Additional monitoring and/or air dispersion modeling to determine property line concentration of hydrogen sulfide based on the implementation of selected odor control alternatives.
- c. Conceptual design and preliminary cost estimate for the proposed odor control alternatives.
- d. Schedule for design and construction of the proposed control alternatives.

**Revision Date: 11/17/2014** 

e. Description of recommended actions.

The Permittee shall complete and submit the Compliance Plan within 120 days of exceeding the hydrogen sulfide emission limitation.

[Rule 220 §303]

### **Emergency Engines**

# 4. Operational Limitations:

a. The Permittee shall limit the operation of each emergency engine to no more than 100 hours each per calendar year for the purposes of maintenance checks and readiness testing.

[Rule 324 §§104.5, 205][40 CFR §§60.4211(e), 63.6640(f)(ii)]

b. The Permittee shall limit the total hours of operation of each emergency engine to no more than 500 hours each per any twelve consecutive months including the hours listed in Subsection [a] above. The daily trigger of Best Available Control Technology (BACT) has been exempted for the emergency engines.

[Rule 220 §302.2]

- c. The emergency engines shall not be used for peak sh aving. The emergency engines shall only be used for the following purposes:
  - i. For power when normal power service fails from the serving utility or if ons ite electrical transmission or onsite power generation equipment fails;
  - ii. Reliability-related activities such as engine readiness, calibration, or maintenance or to prevent the occurrence of an unsafe condition during electrical system maintenance as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter;

[SIP Rule 324 §104] [40 CFR §§60.4211(e), 63.6640(f)(1)(ii)]

## 5. Fuel Limitations:

a. The Permittee shall n ot use any fuel that contains more than 0.05% sulfur by weight, alone or in combination with other fuels in the engines specified in Permit Condition 9 -40 CFR 63 Subpart ZZZZ Operating Requirements.

[SIP Rule 324 §301.1]

b. The Permittee shall only use diesel fuel that has a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and has a maximum sulfur content of 15 parts per million (ppm) in the engines specified in Permit Condition 10 - NSPS Subpart IIII Requirements.

[40 CFR §§60.4207(a,b), 80.510(a,b)]

## 6. Monitoring:

The Permittee shall install a non-resettable hour meter prior to startup of the engines. The Permittee shall not operate the engines unless the cumulative run time meter is installed and working properly.

[Rule 220 §302.4] [40 CFR §§60.4209, 63.6625(f)]

#### 7. Opacity:

- a. The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity, except as specified in Permit Condition 10- NSPS Subpart IIII Requirements
- b. Compliance with visible emissions shall be determined using the techniques specified in EPA Reference Method 9, 40 CFR Part 60, Appendix A.

[SIP Rule 324 §§303, 503.8]

#### 8. New Source Performance Standards:

a. If the Permittee modifies or reconstructs the *Kohler*, 1,528 h.p. stationary compression ignition internal combustion engine after July 11, 2005, that engine shall comply with all applicable requirements of 40

CFR 60 Subpart IIII.

[40 CFR §§ 60.4200(a)(3)]

## 9. 40 CFR 63 Subpart ZZZZ Operating Requirements:

The Kohler, 1,528 h.p. engine shall comply with all requirements of this Permit Condition:

[40 CFR §63.6590]

a. The Permittee shall operate and maintain the engine and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitor ing results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR §63.6605(b)]

b. The Permittee shall operate and maintain the engine according to the manufacturer's emission -related operation and maintenance instructions or develop and follow the Permittee's own maintenance plan which must provide to the extent practicable for the operation and maintenance of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR §63.6640(a)]

- c. The Permittee shall comply with the following maintenance schedule for the engine:
  - i. Change oil and filter or perform an Oil Analysis Program every 500 hours of operation or annually, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The condemning limits for these parameters are as follows:
    - 1) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
    - 2) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new;
    - 3) Percent water content (by volume) is greater than 0.5.

If none of these limits are exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil before continuing to use the engine. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine

- ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- iii. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, for the propane engine.
- iv. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR §63.6603(a); Table 2d(4)]

d. If an engine is operating during an emergency and it is not possible to shut down the engine in order to perform the maintenance requirements on the schedule required by this Permit Condition, or if performing the maintenance operations on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the maintenance operations can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The maintenance operations shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the maintenance operations on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable, in accordance with Permit Condition 12.

[40 CFR §63.6603(a); Table 2d]

e. During periods of startup, the Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR §63.6625(h)]

## 10. NSPS Subpart IIII Requirements:

a. Each of the following *Cummins* engines shall comply with the specified EPA emission standard and all requirements of this Permit Condition:

_		No. of	Model	Maximum	Emission
Engine Make	Model	units	Year	Power	Standard
Cummins	QSL9-G7-NR3	10	2014	464 HP	Tier 3
Cummins	QSL9-G2-NR3	1	2014	364 HP	Tier 3

[40 CFR §60.4205]

### b. Additional Opacity Standard:

The Permittee shall not allow exhaust opacity to exceed 15% during the lugging mode. This restriction does not apply to fire pump engines.

[40 CFR §§60.4205, 89.113(a)(2)]

### c. Crankcase Emissions:

For the engines specified in Subsection [b] of this Permit Condition, the Permittee shall not discharge crankcase emissions into the ambient a tmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction or fire p ump engines.

[40 CFR §§60.4205, 89.112(e)]

- d. The Permittee shall operate and maintain each engine according to the manufacturer's written instructions, or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine.
- e. The Permittee shall only change those engine settings that are permitted by the manufacturer.
- f. The Permittee shall meet the requirements of 40 CFR Part 89 as it applies.

[40 CFR §60.4211(a), 60.4206]

# 11. Recordkeeping:

- a. The Permittee shall maintain the following records for a period of at least five years from the date of the records and make them available to the Control Officer upon request:
  - i. An initial one time entry listing the particular engine combustion type (compression or spar ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.
  - ii. Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance.
  - iii. Fuel type and sulfur content of fuel.
  - iv. An explanation for the use of the engine if it is used as an emergency engine.

[SIP Rule 324 §502][40 CFR §§60.4214(b), 63.6655(f)]

- v. Records of the following for each engine listed in Permit Condition 9 40 CFR 63 Subpart ZZZZ Operating Requirements:
  - 1) Oil and filter change dates or oil analysis results and corresponding hours on the hour meter;
  - 2) Inspection and replacement dates for air cleaners, spark plugs, hoses, and belts;

3) Records of other emission-related repairs and maintenance performed.

[40 CFR §§63.6655(e)(2), 63.6660]

The Permittee shall maintain a copy of manufacturer data for each engine listed in Permit Condition 10
 NSPS Subpart IIII Requirements indicating compliance with the standards in this Permit.

[Rule 220 §302.7][40 CFR §§60.4211(b)(3)]

c. For each engine listed in Permit Conditions 9 and 10, the Permittee shall maintain an onsite copy of the manufacturer's written instructions, or procedures developed by the Permittee in accordance with these Permit Conditions and make it available to MCAQD upon request.

[Rule 220 §302.7] [40 CFR §§63.6655(e)(2), 63.6660]

## 12. Reporting Requirements:

a. Fuel Sulfur Content Verification: If the Control Officer requests proof of the sulfur content of fuel burned in the engines, the Permittee shall submit fuel receipts, contract specificat ions, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur cont ent to meet the applicable sulfur limit shall be permitted if so desired by the owner or operator for evidence of compliance

[Rule 220 §302.7]

b. Deviations from ICE Maintenance Schedule: The Permittee shall report any failure to perform a maintenance operation on the schedule required by Permit Condition 9 of this Permit and the Federal, State or local law under which the risk was deemed unacceptable. The Report shall be submitted to the Control Officer, Attn: Compliance Division Manager, within 2 working days after the date on which the maintenance operation was required to be performed. A subsequent report shall be submitted to the Control Officer within 2 working days after the required maintenance operation is performed.

[Rule 220 §302.8; Rule 130 §402.4] [40 CFR §63.6640(b)]

## 13. Emergency Provisions:

The Permittee shall comply with all recordkeeping and reporting requirements of Rule 130 (Emergency Provisions) and Rule 140 (Excess Emissions) if the annual allowable hours of operation are exceeded.

[Rule 130; Rule 140]

## **GENERAL CONDITIONS**

## 14. POSTING OF PERMIT:

This Permit shall be posted in a clearly visible and accessible location on the site where installed.

the equipment is

[Rule 200 §312]

## 15. Compliance:

The issuance of any Permit or Permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a Permit or Permit revision required under the County Rules.

[Rule 200 §309; Rule 220 §406.3][Locally Enforceable Only]

b. The Permittee shall comply with all conditions of this Permit including all applicable requirements of Federal laws, Arizona laws, and Maricopa County Air Pollution Control Rules and Regulations now in effect and as amended in the future. Any Permit noncompliance is grounds for enforcement action, Permit termination or revocation, or for denial of a renewal application. In addition, non -compliance with any federally enforceable requirements constitutes a violation of the Clean Air Act.

[A.A.C R18-2-306.A.8.a][Locally Enforceable Only]

c. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to

halt or reduce the permitted activity in order to maintain compliance with these Permit Conditions. [Rule 220 §302.10, 11] [A.A.C. R18-2-306.A.8.b] [Locally Enforceable Only]

d. Rights and Privileges: This Permit does not convey any property rights or exclusive privilege of any sort.

[Rule 220 §302.12] [Locally Enforceable Only]

e. Fees: The Permittee shall pay all fees to the Control Officer in accordance with Rule 280. No permit or permit revision is valid until the applicable permit fee has been received and until the permit is issued by the Control Officer.

[Rule 200 §409; Rule 280 §302] [ARS 49-480(D)] [SIP Rule 28]

## 16. Malfunctions, Emergency Upsets, and Excess Emissions:

An affirmative defense of an emergency, excess emission, and/or during startup and shutdown shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence as outlined in Rule 130 for emergencies and Rule 140 for excess emissions.

[Rule 130 §§201, 400; Rule 140 §§400, 500] [SIP Rule 140]

## 17. Revision / Reopening / Revocation:

The Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[Rule 220 §302.11][Locally Enforceable Only]

#### 18. Records:

- a. The Permittee shall furnish i information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. The information shall be provided in a timeframe specified by the Control Officer. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality.

  [Rule 220 §302.13] [SIP Rule 40]
- b. If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application is filed but prior to release of a proposed permit. Willful misrepresentation of facts in a permit application is cause for revocation or denial of a permit.

[Rule 220 §§301.5, 301.6] [Locally Enforceable Only]

## 19. Right to Entry:

- a. The Control Officer during reasonable hours, for the purpose of enforcing and administering County or SIP Rules or the Clean Air Act, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS 49 -488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.
- b. The Permittee shall allow the Control Officer or his designated representatives, upon presentation of proper credentials (e.g., Maricopa County Air Quality Department identification) and other documents as may be required by law, to:
  - i. Enter upon the Permittee's premises where a source is located or emissions -related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;
  - ii. Have access to and copy, at reasonable times, any r ecords that are required to be kept pursuant to the conditions of the permit;

- iii. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
- iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the Permit or other applicable requirements; and
- v. To record any inspection by use of written, electronic, magnetic, and photographic media.

  [Rule 100 §105; Rule 220 §302.17-21] [SIP Rule 43]

# 20. Severability:

The rules, paragraphs, clauses, provisions, and/or sections of this Permit are severable, and, if any rule, paragraph, clause, provision, and/or section of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

[Rule 220 §302.9] [SIP Rule 80]